

REMARKS/ARGUMENTS

Initially, Applicants would like to express their appreciation to the Examiner for the detailed Official Action provided.

Upon entry of the above amendments, claims 1, 6, 9, 10, 14-18 and 20-22 will have been amended. Claims 1-11 and 14-23 are currently pending. Applicants respectfully request reconsideration of the outstanding rejections, and allowance of all the claims pending in the present application.

In the Official Action, the Examiner has rejected claims 1-3 and 14-15 under 35 U.S.C. § 103(a) as being unpatentable over WIEDEMANN et al. (U.S. Patent No. 5,448,792) in view of KOFINK (DE 29 06 404); and

the Examiner has rejected claims 4-11 and 14-23 under 35 U.S.C. § 103(a) as being unpatentable over WIEDEMANN in view of KOFINK, and further in view of LI (U.S. Patent No. 6,429,611).

Without acquiescing to the propriety of the Examiner's rejections, claims 1, 16, and 20 have been amended solely in order to expedite prosecution of the present application, while the amendments to the language of the various dependent claims have been made to merely enhance clarity.

In this regard, Applicants note that WIEDEMANN, KOFINK, and LI, alone or in any properly reasoned combination, do not disclose each and every element as recited in amended claim 1 (*i.e.*, even assuming, arguendo, that the applied references have been properly combined).

In particular, claims 1, 16 and 20 each generally recite a tooth brush

including, inter alia, an amplitude of a reciprocal movement of the brush in an axial direction of the drive shaft being equal to or smaller than 4mm; a frequency of the reciprocal movement of the brush in an axial direction of the drive shaft being in a range of 100 Hz to 350 Hz; and an angle of a reciprocal swinging motion of the brush around a center axis of the drive shaft being equal to or smaller than 20 degrees.

Initially, Applicants note that support for the above-noted recitations can be found in Japanese Patent Application No. 2002-341720, of which the present Application claims priority, and the contents of which have been incorporated herein by reference are page 17 of the present Application. Accordingly, no new matter is believed to be added by entry of the present amendment to the claims.

Further, Applicants submit that WIEDEMANN, KOFINK, and LI, alone or in any proper combination, do not disclose at least the above-noted combination of elements.

More specifically, Applicants note that KOFINK and LI do not specify the particular ranges (or parameters) of an amplitude of a reciprocal movement of the brush in an axial direction of the drive shaft, a frequency of the reciprocal movement of the brush in an axial direction of the drive shaft; or an angle of a reciprocal swing motion of the brush around a center axis of the drive shaft.

Further, WIEDEMANN discloses various ranges of a loosening movement (8) and a wiping movement (9). However, none of the closed ranges (i.e., specified ranges) disclosed in WIEDEMANN discloses at least the presently

claimed amplitude of a reciprocal movement of the brush in an axial direction of the drive shaft being equal to or smaller than 4mm; a frequency of the reciprocal movement of the brush in an axial direction of the drive shaft being in a range of 100 Hz to 350 Hz; and an angle of a reciprocal swing motion of the brush around a center axis of the drive shaft being equal to or smaller than 20 degrees, as generally recited in independent claims 1, 16 and 20.

Applicants note that WIEDEMANN discloses a loosening frequency greater than 30 HZ. However, this unlimited range must be understood in view of the totality of the disclosure that teaches a range between 60 and 70 HZ. Moreover, even this generic disclosure of a frequency greater than 30 HZ does not render obvious the specifically recited range of between 100 and 350 HZ.

In this regard, Applicants submit that these recited parameters provide particular benefits. In particular, at least one advantage of the presently claimed combination of elements is that a toothbrush having enhanced performance is provided. More specifically, the presently claimed amplitude of a reciprocal movement of the brush in an axial direction of the drive shaft and an angle of a reciprocal swing motion of the brush around a center axis of the drive shaft both help reduce contact with the gums; thereby, providing a more gentle toothbrush. Additionally, the presently claimed reciprocal movement of the brush in an axial direction of the drive shaft provides enhanced plaque removal capabilities. These advantages are not taught by any of the cited references.

In view of the amendments and remarks herein, Applicants submit that

independent claims 1, 16 and 20 are in condition for allowance. With regard to dependent claims 2-11, 14, 15, 17-19 and 21-23, Applicants assert that these claims are allowable on their own merit, as well as because of their respective dependencies from independent claims 1, 16 and 20, which Applicants have shown to be allowable.

Thus, it is respectfully submitted that all pending claims in the present application are clearly patentable over the references cited by the Examiner, either alone or in combination, and an indication to such effect is respectfully requested, in due course.


### SUMMARY

Applicants submit that the present application is in condition for allowance, and respectfully request an indication to that effect. Applicants have argued the allowability of the claims and pointed out deficiencies of the applied reference. Accordingly, reconsideration of the outstanding Official Action and allowance of the present application and all the claims therein are respectfully requested and is now believed to be appropriate.

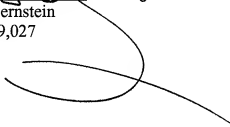
Applicants note that this amendment is being made to advance prosecution of the application to allowance and should not be considered as surrendering equivalents of the territory between the claims prior to the present amendment and the amended claims. Further, no acquiescence as to the propriety of the Examiner's rejection is made by the present amendment. All other amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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